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PATENT MAINTENANCE  
DIVISION

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2006 AUG -9 PM 4:40

US PATENT & TRADEMARK  
OFFICE

August 3, 2006

**U.S. First Class Mail**

Attention: Refund Branch  
Mail Stop 16  
Director of USPTO  
P.O. Box 1450  
Alexandria, VA 22313-1450

**Re: Request for refund to Deposit Account No. 010535**

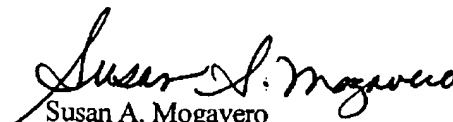
Dear Sir or Madam:

We are requesting a refund to our Deposit Account No. 010535 in the amount of \$2150.00 due to a claim calculation error on the part of the USPTO in USSN 10/559,595. Attached please find a copy of our Request for Corrected Filing Receipt filed on August 2, 2006. In addition, please find the Transmittal Letter and four (4) pages of claims filed on November 30, 2005 in support of our refund request. We authorized payment of a total of 27 claims with 3 independent claims; however, we were charged for a total of 50 claims with 8 independent claims incorrectly. Therefore, we respectfully request a refund to our deposit account at your earliest convenience.

Thank you in advance for your assistance in this matter.

Very truly yours,

**AMYLIN PHARMACEUTICALS, INC.**

  
Susan A. Mogavero  
IP Supervisor

Enclosures

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

**Appl. Serial No.:** 10/559,595

**Inventors:** John ONG, et al

**Filed:** November 30, 2005

**Title:** NOVEL METHODS AND COMPOSITIONS  
FOR ENHANCED TRANSMUCOSAL DELIVERY OF  
PEPTIDES AND PROTEINS

**Confirmation No.:** Not Yet Assigned

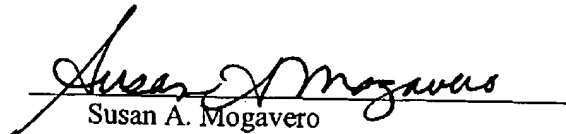
**TC/A.U.:** Not Yet Assigned

**Examiner:** Not Yet Assigned

**FACSIMILE TRANSMITTAL COVER SHEET**

**Certificate of Transmission Under 37 C.F.R. 1.8**

I hereby certify that the following listed correspondence in the above-referenced application is being transmitted by facsimile to the Commissioner for Patents, Alexandria, VA to telephone number (571) 273-8300 on this 2nd day of August, 2006.

  
Susan A. Mogavero

**Document(s)**

**No. of Pages**

Request for corrected filing receipt  
Filing Receipt  
Corrected Filing Receipt  
Transmittal Sheet as filed  
Claims as filed

1  
1  
1  
3  
4

**Total number of pages transmitted (including this page):**

**11**

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or this certificate must identify each paper submitted***

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P.O. Box 1450  
Alexandria, VA 22313-1450

**Confirmation No.:** Not Yet Assigned

**TC/A.U.:** Not Yet Assigned

**Examiner:** Not Yet Assigned

**REQUEST FOR CORRETED FILING RECEIPT**

Sir:

Applicant respectfully requests that the Filing Receipt for the above referenced patent application be corrected as follows:

**Total Claims:** 27

**Independent Claims:** 3

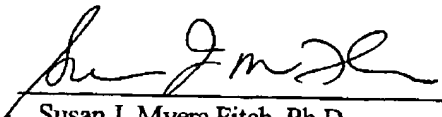
A copy of the original Filing Receipt and Filing Receipt with corrections indicated is attached hereto. In addition, please find a copy of the Transmittal Letter with the correct fee calculation to the US DO/EO/US concerning a submission under 35 U.S.C. 371 along with Claims 1-27 as filed.

No fees are believed due for this request for correction to filing receipt. However, if a fee is due, the Commissioner is authorized to charge any fees associated with the present filing to Deposit Account No. 01-0535.

Please call the undersigned at the number listed below if there are any questions concerning this submission.

Respectfully submitted,

Dated: 2 Aug 2006

By:   
Susan J. Myers Fitch, Ph.D.  
Reg. No. 55,477

AMYLIN PHARMACEUTICALS, INC.  
9373 Towne Centre Drive  
San Diego, CA 92121  
Phone 858.309-7695  
Fax 858.552.1936



## UNITED STATES PATENT AND TRADEMARK OFFICE

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18528.912

0501-UTL

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APPL NO.	FILING OR 371 (c) DATE	ART UNIT	FIL FEE REC'D	ATTY. DOCKET NO	DRAWINGS	TOT CLMS	IND CLMS
10/559,595	11/30/2005	1654	3100	0501-UTL-0	2 ✓	50	8

44638

ARNOLD & PORTER LLP (18528)  
555 TWELFTH ST, NW  
WASHINGTON, DC 20004



CONFIRMATION NO. 2750

## FILING RECEIPT



\*OC000000018619208\*

Date Mailed: 04/27/2006

Receipt is acknowledged of this regular Patent Application. It will be considered in its order and you will be notified as to the results of the examination. Be sure to provide the U.S. APPLICATION NUMBER, FILING DATE, NAME OF APPLICANT, and TITLE OF INVENTION when inquiring about this application. Fees transmitted by check or draft are subject to collection. Please verify the accuracy of the data presented on this receipt. If an error is noted on this Filing Receipt, please mail to the Commissioner for Patents P.O. Box 1450 Alexandria Va 22313-1450. Please provide a copy of this Filing Receipt with the changes noted thereon. If you received a "Notice to File Missing Parts" for this application, please submit any corrections to this Filing Receipt with your reply to the Notice. When the USPTO processes the reply to the Notice, the USPTO will generate another Filing Receipt incorporating the requested corrections (if appropriate).

## Applicant(s)

John Ong, San Marcos, CA;  
Robert Jennings, San Diego, CA;  
Gregg Statsko, San Diego, CA;

## Amylin Docketing

noted

☐ Previously Docketed

## Assignment For Published Patent Application

Amylin Pharmaceuticals, Inc., San Diego, CA ✓

Power of Attorney: The patent practitioners associated with Customer Number 44638.

## Domestic Priority data as claimed by applicant

This application is a 371 of PCT/US04/17456 05/28/2004  
which claims benefit of 60/474,233 05/30/2003

## Foreign Applications

If Required, Foreign Filing License Granted: 04/25/2006

The country code and number of your priority application, to be used for filing abroad under the Paris Convention, is **US10/559,595**

Projected Publication Date: 08/03/2006 ✓

Non-Publication Request: No

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MAY 03 2006

Docketed

Due Date

N/A

B

AMYLIN PHARMACEUTICALS, INC.  
LEGAL DEPARTMENT

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## UNITED STATES PATENT AND TRADEMARK OFFICE

 UNITED STATES DEPARTMENT OF COMMERCE  
 United States Patent and Trademark Office  
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APPL NO.	FILING OR 371 (*) DATE	ART UNIT	FILE REC'D	ATTY. DOCKET NO	DRAWINGS	TOT CLMS	IND CLMS
10/559,595	11/30/2005	1654	3100	0501-UTL-0	2 ✓	80 27	8 3

CONFIRMATION NO. 2760

44838

 ARNOLD & PORTER LLP (18528)  
 555 TWELFTH ST, NW  
 WASHINGTON, DC 20004


## FILING RECEIPT



\*0000000018819208\*

Date Mailed: 04/27/2006

Receipt is acknowledged of this regular Patent Application. It will be considered in its order and you will be notified as to the results of the examination. Be sure to provide the U.S. APPLICATION NUMBER, FILING DATE, NAME OF APPLICANT, and TITLE OF INVENTION when inquiring about this application. Fees transmitted by check or draft are subject to collection. Please verify the accuracy of the data presented on this receipt. If an error is noted on this Filing Receipt, please mail to the Commissioner for Patents P.O. Box 1450 Alexandria Va 22313-1450. Please provide a copy of this Filing Receipt with the changes noted thereon. If you received a "Notice to File Missing Parts" for this application, please submit any corrections to this Filing Receipt with your reply to the Notice. When the USPTO processes the reply to the Notice, the USPTO will generate another Filing Receipt incorporating the requested corrections (if appropriate).

## Applicant(s)

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 Robert Jannings, San Diego, CA;  
 Gregg Statsko, San Diego, CA;

Amylin Docketing	
noted	
<input type="checkbox"/>	Previously Docketed

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Amylin Pharmaceuticals, Inc., San Diego, CA

Power of Attorney: The patent practitioners associated with Customer Number 44838.

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Projected Publication Date: 08/03/2006

Non-Publication Request: No

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<b>TRANSMITTAL LETTER TO THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US) CONCERNING A SUBMISSION UNDER 35 U.S.C. 371</b>		ATTORNEY'S DOCKET NUMBER <b>0501-UTL-0</b>
		U.S. APPLICATION NO. (if known, see 37 CFR 1.5)
INTERNATIONAL APPLICATION NO. <b>PCT/US2004/017456</b>	INTERNATIONAL FILING DATE <b>May 28, 2004</b>	PRIORITY DATE CLAIMED <b>May 30, 2003</b>
TITLE OF INVENTION <b>Novel Methods and Compositions for Enhanced Transmucosal Delivery of Peptides and Proteins</b>		
APPLICANT(S) FOR DO/EO/US <b>John Ong, Gregg Stetsko, Robert Jennings</b>		
Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:		
<ol style="list-style-type: none"> <li>1. <input checked="" type="checkbox"/> This is a <b>FIRST</b> submission of items concerning a submission under 35 U.S.C. 371.</li> <li>2. <input type="checkbox"/> This is a <b>SECOND</b> or <b>SUBSEQUENT</b> submission of items concerning a submission under 35 U.S.C. 371.</li> <li>3. <input checked="" type="checkbox"/> This is an express request to begin national examination procedures (35 U.S.C. 371(f)). The submission must include items (5), (6), (9) and (21) indicated below.</li> <li>4. <input checked="" type="checkbox"/> The US has been elected (Article 31).</li> <li>5. <input checked="" type="checkbox"/> A copy of the International Application as filed (35 U.S.C. 371(c)(2)) <ol style="list-style-type: none"> <li>a. <input type="checkbox"/> is attached hereto (required only if not communicated by the International Bureau).</li> <li>b. <input type="checkbox"/> has been communicated by the International Bureau.</li> <li>c. <input checked="" type="checkbox"/> is not required, as the application was filed in the United States Receiving Office (RO/US).</li> </ol> </li> <li>6. <input type="checkbox"/> An English language translation of the International Application as filed (35 U.S.C. 371(c)(2)). <ol style="list-style-type: none"> <li>a. <input type="checkbox"/> is attached hereto.</li> <li>b. <input type="checkbox"/> has been previously submitted under 35 U.S.C. 154(d)(4).</li> </ol> </li> <li>7. <input checked="" type="checkbox"/> Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371(c)(3)) <ol style="list-style-type: none"> <li>a. <input type="checkbox"/> are attached hereto (required only if not communicated by the International Bureau).</li> <li>b. <input type="checkbox"/> have been communicated by the International Bureau.</li> <li>c. <input type="checkbox"/> have not been made; however, the time limit for making such amendments has NOT expired.</li> <li>d. <input checked="" type="checkbox"/> have not been made and will not be made.</li> </ol> </li> <li>8. <input type="checkbox"/> An English language translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)).</li> <li>9. <input checked="" type="checkbox"/> An oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4)).</li> <li>10. <input type="checkbox"/> An English language translation of the annexes of the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371(c)(5)).</li> </ol>		
Items 11 to 20 below concern document(s) or information included:		
<ol style="list-style-type: none"> <li>11. <input type="checkbox"/> An Information Disclosure Statement under 37 CFR 1.97 and 1.98.</li> <li>12. <input type="checkbox"/> An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included.</li> <li>13. <input checked="" type="checkbox"/> A preliminary amendment.</li> <li>14. <input checked="" type="checkbox"/> An Application Data Sheet under 37 CFR 1.76.</li> <li>15. <input checked="" type="checkbox"/> A substitute specification.</li> <li>16. <input checked="" type="checkbox"/> A power of attorney and/or change of address letter.</li> <li>17. <input checked="" type="checkbox"/> A computer-readable form of the sequence listing in accordance with PCT Rule 13ter.2 and 37 CFR 1.821-1.825.</li> <li>18. <input type="checkbox"/> A second copy of the published International Application under 35 U.S.C. 154(d)(4).</li> <li>19. <input type="checkbox"/> A second copy of the English language translation of the international application under 35 U.S.C. 154(d)(4).</li> </ol>		

This collection of information is required by 37 CFR 1.414 and 1.491-1.492. The information is required to obtain or retain a benefit by the public, which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 16 minutes to complete, including gathering information, preparing, and submitting the completed form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop PCT, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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FORM PTO-1390 (REV. 07-2005)

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- a. ☐ A check in the amount of \$ \_\_\_\_\_ to cover the above fees is enclosed.
- b. ☒ Please charge my Deposit Account No. 010535 in the amount of \$ 950.00 to cover the above fees.  
A duplicate copy of this sheet is enclosed.
- c. ☒ The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. 010535. A duplicate copy of this sheet is enclosed.
- d. ☐ Fees are to be charged to a credit card. **WARNING:** Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

NOTE: Where an appropriate time limit under 37 CFR 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b)) must be filed and granted to restore the International Application to pending status.

SEND ALL CORRESPONDENCE TO:

the address associated with Customer  
Number 44638

SIGNATURE

James E. Butler, Ph.D.

NAME

40931

REGISTRATION NUMBER



Substitute Specification - Clean Version

What is claimed is:

1. A pharmaceutical composition for transmucosal administration of an exendin or exendin analog, comprising an exendin or an exendin analog, a cationic polyamino acid, and a buffer; wherein at the pH of the composition the buffer does not cause precipitation of the cationic polyamino acid and has a mono-anionic or neutral net charge; and wherein the transmucosal absorption of the exendin or exendin analog is increased relative to the absorption of the exendin or exendin analog in the absence of the polyamino acid.
- 5 2. The composition of claim 1, wherein the pH of the composition is between about pH 4.0 and about pH 6.0.
3. The composition of claim 1, wherein the pH of the composition is between about pH 4.0 and pH 5.0.
4. The composition of claim 1, wherein the buffer is selected from the group consisting of acetic acid,  $\epsilon$ -aminocaproic acid or glutamic acid.
5. The composition of claim 1, wherein the buffer comprises glutamic acid.
6. The composition of claim 1, further comprising a tonicifying agent, a viscosity-increasing agent, a bioadhesive agent, a preservative, or any combination thereof.
7. The composition of claim 1, wherein the cationic polyamino acid comprises poly-histidine, poly-arginine, poly-lysine, or any combination thereof.
8. The composition of claim 7, wherein the cationic polyamino acid has an average molecule weight of between about 10 kDa and about 200 kDa.
9. The composition of claim 1, wherein the exendin or exendin analog is selected from at least one of the group consisting of exendin-3, exendin-4, exendin-4 acid,

Substitute Specification - Clean Version

exendin-4 (1-30), exendin-4 (1-30) amide, exendin-4 (1-28), exendin-4 (1-28) amide, <sup>14</sup>Leu, <sup>25</sup>Phe exendin-4 amide, and <sup>14</sup>Leu, <sup>25</sup>Phe exendin-4 (1-28) amide.

10. The composition of claim 1, wherein the exendin or exendin analog comprises exendin-4.
11. The composition of claim 1, wherein the exendin or exendin analog comprises exendin-3.
12. The composition of claim 1, wherein the exendin or exendin analog comprises at least one exendin selected from the group consisting of SEQ ID NOs: 9-39, 187 and 188.
13. The composition of claim 1, wherein the exendin or exendin analog comprises at least one exendin or exendin analog selected from the group consisting of SEQ ID NOs: 6-8 and 40-186.
14. The composition of claim 1, wherein the exendin or exendin analog comprises an amino acid sequence according to SEQ ID NO. 3.
15. The composition of claim 1, wherein the exendin or exendin analog comprises an amino acid sequence according to SEQ ID NO. 4.
16. The composition of claim 1, wherein the exendin or exendin analog comprises an amino acid sequence according to SEQ ID NO. 5.
17. The composition of claim 6, wherein the tonicifying agent is selected from the group consisting of sodium chloride, mannitol, sucrose, glucose and any combination thereof.
18. The composition of claim 6, wherein the viscosity-increasing agent is selected from the group consisting of hydroxypropyl cellulose, hydroxypropyl methylcellulose, methylcellulose of average molecular weight between about 10 and about 1,500 kDa, starch, gums, and any combination thereof.

Substitute Specification - Clean Version

19. The composition of claim 6, wherein the bioadhesive agent is selected from the group consisting of carbomer, polycarbophil and any combination thereof.
20. The composition of claim 6, wherein the preservative is selected from the group consisting of phenylethyl alcohol, methylparaben, ethylparaben, propylparaben, butylparaben, chlorbutanol, benzoic acid, sorbic acid, phenol, m-cresol, alcohol, and any combination thereof.
21. The composition of claim 1, wherein the absorption is increased at least 2 fold.
22. The composition of claim 1, wherein the absorption is increased at least 5 fold.
23. The composition of claim 1, wherein the absorption is increased at least 10 fold.
24. A pharmaceutical composition for transmucosal administration of an exendin or an exendin analog comprising about 0.10% to about 5.0% (w/v) of an exendin or an exendin analog; about 0.01% to about 1.0% (w/v) of a cationic polyamino acid having a molecular weight between about 10 kDa and about 200 kDa; about 0.01% to  
5 about 10.0% (w/v) of a buffer, wherein at a pH of between about 4.0 and 5.0, the buffer does not cause precipitation of the cationic polyamino acid and the buffer has a mono-anionic or neutral net charge; and wherein the transmucosal adsorption of the exendin or exendin analog is increased relative to the adsorption of the exendin or exendin analog in the absence of the cationic polyamino acid.
25. The composition of claim 24, wherein the exendin or exendin analog comprises exendin-4.

Substitute Specification - Clean Version

26. A method for transmucosal administration of an exendin or an exendin analog comprising contacting a mucosal surface with a composition comprising an exendin or an exendin analog, a cationic polyamino acid, and a buffer for a time sufficient for a therapeutically effective amount of said exendin or exendin analog to pass through the mucosal surface; wherein at the pH of the composition, the buffer does not cause precipitation of the cationic polyamino acid and the buffer has a mono-anionic or neutral net charge; and wherein the transmucosal adsorption of the exendin or exendin analog is increased relative to the absorption of the exendin or exendin analog in the absence of the cationic polyamino acid.
- 5
27. The method of claim 26, wherein the exendin or exendin analog comprises exendin-4.

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08/02/2006 15:01 8585529098		PAGE 01
Atty. Docket No. 0601-UTL		
<b>IN THE UNITED STATES PATENT AND TRADEMARK OFFICE</b>		
Appl. Serial No.: 10/559,595	Confirmation No.: Not Yet Assigned	
Inventors: John ONG, et al	TC/A.U.: Not Yet Assigned	
Filed: November 30, 2005	Examiner: Not Yet Assigned	
Title: NOVEL METHODS AND COMPOSITIONS FOR ENHANCED TRANSMUCOSAL DELIVERY OF PEPTIDES AND PROTEINS		
<b>FACSIMILE TRANSMITTAL COVER SHEET</b>		
<b>Certificate of Transmission Under 37 C.F.R. 1.8</b>		
I hereby certify that the following listed correspondence in the above-referenced application is being transmitted by facsimile to the Commissioner for Patents, Alexandria, VA to telephone number (571) 273-8300 on this 2nd day of August, 2006.		
 Susan A. Mogavero		
Document(s)	No. of Pages	
Request for corrected filing receipt	1	
Filing Receipt	1	
Corrected Filing Receipt	1	
Transmittal Sheet as filed	3	
Claims as filed	4	
Total number of pages transmitted (including this page):		11
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Rev. 21-Feb-06		
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